



## Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method comprising:  
determining a status of ~~[[the]]~~ a system;  
setting an associativity level of a non-volatile memory unit of the system, based on the status of the system, wherein the non-volatile memory unit is a cache for a hard disk of the system and in response to determining the system is receiving power from a battery power source, setting the associativity level to a first level of associativity, the first level of associativity includes greater associativity than a second level of associativity.

2-3. (Canceled)

4. (Currently Amended) The method of claim ~~[[3]]~~ 1, wherein in response to determining the system is receiving AC power from a wall outlet, setting the associativity level to the second level of associativity.

5. (Original) The method of claim 4, wherein the first level of associativity is at least a 6 way set associative cache.

6. (Original) The method of claim 4, wherein the second level of associativity is a 4 way set associative cache.

7. (Original) The method of claim 1, wherein the second level of associativity is a 2 way set associative cache.

8. (Currently Amended) A machine-readable medium having stored thereon a set of instructions which when executed cause a system to perform a method comprising of:

determining a status of ~~[[the]]~~ a system;

setting an associativity level of a non-volatile memory unit of the system, based on the status of the system, wherein the non-volatile memory unit is a cache for the hard disk and in response to determining the system is receiving power from a battery power source, setting the associativity level to a first level of associativity, the first level of associativity includes greater associativity than a second level of associativity.

9-10. (Canceled)

11. (Original) The machine-readable medium of claim 8, wherein in response to determining the system is receiving AC power from a wall outlet, setting the associativity level to the second level of associativity.

12. (Original) The machine-readable medium of claim 8, wherein the first level of associativity is at least a 6 way set associative cache.

13. (Original) The machine-readable medium of claim 8, wherein the second level of associativity is a 4 way or less set associative cache.

14. (Original) The machine-readable medium of claim 8, wherein the second level of associativity is a 2 way set associative cache.

15. (Currently Amended) A system comprising:  
a processor;  
a non-volatile cache coupled to the processor, wherein the non-volatile cache is a cache for a hard disk of the system; and  
a machine readable medium having stored thereon a set of instructions which when executed cause the system to perform a method comprising of:  
determining a status of [[the]] a system;  
setting an associativity level of the non-volatile cache of the system, based on the status of the system.

16. (Canceled)

17. (Currently Amended) The system of claim ~~[[16]]~~ 15, wherein in response to determining the system is receiving power from a battery power source, setting the associativity level to a first level of associativity, the first level of associativity includes greater associativity than a second level of associativity.

18. (Original) The system of claim 17, wherein in response to determining the system is receiving AC power from a wall outlet, setting the associativity level to the second level of associativity.

19. (Original) The system of claim 18, wherein the first level of associativity is at least a 6 way set associative cache.

20. (Original) The system of claim 18, wherein the second level of associativity is a 4 way or less set associative cache.

21. (Original) The system of claim 18, wherein the second level of associativity is a 2 way set associative cache.